LEGISLATIVE SERVICES AGENCY OFFICE OF FISCAL AND MANAGEMENT ANALYSIS

200 W. Washington, Suite 301 Indianapolis, IN 46204 (317) 233-0696 http://www.in.gov/legislative

FISCAL IMPACT STATEMENT

LS 7597 NOTE PREPARED: Jan 13, 2009

BILL NUMBER: HB 1594 BILL AMENDED:

SUBJECT: Individual Renewable Energy Credit.

FIRST AUTHOR: Rep. Walorski BILL STATUS: As Introduced

FIRST SPONSOR:

FUNDS AFFECTED: X GENERAL IMPACT: State

DEDICATED FEDERAL

<u>Summary of Legislation:</u> This bill provides a tax credit for an individual who invests in a residential renewable energy system, an alternative fuel vehicle, or a hybrid vehicle.

Effective Date: January 1, 2010.

Explanation of State Expenditures: Department of State Revenue (DOR): This bill will increase expenditures for the DOR. The DOR will have to amend forms, adopt rules and procedures, and update computer software to incorporate the tax credit established in this bill. The amount of increased expenditures is indeterminable, but it is estimated that the DOR could implement these provisions through the use of existing staff and resources.

Explanation of State Revenues: *Summary* - This bill would provide a new tax credit for taxpayers who purchase renewable energy systems for residences or hybrid or alternative fuel vehicles beginning in tax year 2010. The tax credit could potentially reduce revenue from the Individual Adjusted Gross Income (AGI) tax by \$20.6 M to \$22.0 M in FY 2011 and by \$26.2 M to \$27.5 M in FY 2012. Revenue collected from the individual AGI tax is deposited in the state General Fund.

<u>Background Information</u> - Individual Tax Credit: The tax credit is equal to the lesser of \$2,500 or 15% of the amount of the expenditure for the renewable energy system or vehicle purchased in the taxable year. If the renewable energy system or vehicle is purchased on an installment basis, then the tax credit may be claimed for the taxable year in which the system or vehicle was acquired, and is not eligible for following years. The tax credit may be carried forward for no more than two years, but may not be carried back or refunded. Estimates were obtained by determining whether the average cost of the renewable energy system

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or vehicle purchase values multiplied by 15% exceeded \$2,500. Forecasts from the Energy Information Association and the Office for the Study of Automotive Transportation were also utilized.

Renewable or Alternative Energy Technology: According to the American Wind Energy Association, the estimated cost of construction for a residential wind energy system can range from \$6,000 to \$22,000. The cost is determined by class and size of turbines, as well as wind speed. Because wind power is highest during the winter and spring and lowest in the summer in Indiana, wind energy may be a better source for heating than for cooling. Accounting for wind speed, \$2,500 would probably be the lesser value for any tax credits for residential wind energy systems.

Solar energy could be utilized for electricity and thermal energy. Because of the lack of annual solar radiation, Indiana would have more use for flat-plate collectors for low temperature requirements than for grid-connected solar projects. Flat-plate collectors can be utilized to heat swimming pools, domestic water, and provide spatial heating in buildings. These systems are estimated to cost between \$1,500 and \$3,000, and so the average value for tax credits for solar thermal systems would be approximately \$340.

Photovoltaic (PV) cells convert sunlight directly into electricity. These systems vary in cost based upon watts. Also, the larger the system, the lower the cost per watt. A 2-kilowatt system is estimated to cost approximately \$11,000, and a 10-kilowatt system is estimated to cost \$60,000. It is more likely that the lesser value would be \$2,500 for tax credits resulting from the purchase and installation of a PV system.

Light emitting diodes (LEDs), semiconductors that convert electricity into light, are currently utilized in refrigerated display cases, street and area lights, and outdoor step and porch lights. Bulbs range from \$25 to \$60 for small lamps. Assuming that the average household would purchase ten bulbs would make the average credit approximately \$64.

Hybrid and Alternative Fuel Vehicles: Hybrids range in cost from \$20,000 to \$60,000, and alternative fuel vehicles can vary from \$15,000 to \$40,000 (this bill excludes all vehicles that operate on E85). Thus, the lesser value for purchases of hybrids and alternative fuel vehicles would be \$2,500 for the individual tax credit.

Explanation of Local Expenditures:

Explanation of Local Revenues:

State Agencies Affected: DOR.

Local Agencies Affected:

<u>Information Sources:</u> Indiana Renewable Energy Resources Study, 2007; U.S. Department of Energy, Energy Efficiency and Renewable Energy, Annual Report on U.S. Wind Power Installation, Cost and Performance Trends: 2007; American Wind Energy Association, http://www.awea.org; National Climatic Data Center.

Fiscal Analyst: Jessica Harmon, 317-232-9854.

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